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Textile Testing in Germany. Published in ASTM BULLETIN, No. 144, January, 1947, p. 17.

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Ignition Temperatures of Rigid Plastics. Published in ASTM BULLETIN, No. 146, May, 1947, p. 80. Discussion, ASTM BULLETIN, No. 148, October, 1947, p. 87.

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Evaluation of Film Properties of Automotive and Appliance Finishes—Summary of Proceedings of the Philadelphia Spring Meeting—Symposium on Paint and Paint Materials (1947), 1154.

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